REMARKS/ARGUMENTS

The Office asserts that it would be obvious to modify the process of Ostrowicki (U.S. 5,910,534) to include a step of neutralizing the carboxylic acid groups of an ethylenically unsaturated carboxylic acid monomer in the manner allegedly disclosed in any of Basu (U.S. 4,458,057); Egraz (U.S. 6,184,321); and Kimura (U.S. 4,985,514).

In an Amendment filed on May 30, 2008 Applicants provided evidence in rebuttal of the rejection (see the last paragraph on page 10 through page 12 of the May 30 Amendment). Applicants pointed out that the present specification includes a side-by-side comparison of the presently claimed invention with the closest prior art (i.e., Ostrowicki). Applicants showed that in comparison to the process of Ostrowicki, the presently claimed process produces substantially less coagulum and permits faster filtration and more efficient manufacture of a polymer product.

Nothing in any of the art relied on by the Office discloses or suggests that carrying out a polymerization according to the conditions recited in the present claims would provide a process that forms a lower amount of coagulum. If the Office's basis for rejecting the claims were correct the presently claimed process would exhibit the same behavior as the Ostrowicki process (e.g., one would have no reason to believe a reduction in coagulum formation would result from the allegedly obvious modification of the Ostrowicki process). Applicants have shown to the contrary that the presently claimed process is significantly better than the Ostrowicki process.

Nothing in the cited art would allow one to foresee that such an improvement would necessarily result by modifying the Ostrowicki process to arrive at the presently claimed process. The evidence of the original specification thus rebuts the Office's assertion of obviousness.

The September 3, 2008 Office Action does not appear to give any consideration to Applicants' rebuttal evidence. Applicants submit that the Office's failure to consider this evidence in support of patentability is legal error.

Applicants request the Office acknowledge and give full consideration to Applicants' evidence in support of patentability as explained in the May 30 Amendment and withdraw the rejection.

The May 30 Amendment further pointed out that the process of Basu is substantially different from the presently claimed process. For example, Basu relates to a process in which vinyl chloride monomer are polymerized (see page 9 of the May 30 Amendment). The Office nonetheless maintained the rejection over Ostrowicki and Basu.

Applicants submit that the Office failed to set forth a *prima facie* case of obviousness and thus the rejection should be withdrawn. The Office did not provide any rational explanation why one of ordinary skill in the art would treat the monomer mixture recited in the present claims in the same manner as the vinyl chloride-based monomer mixture of Basu. Applicants submit that it makes no sense to carry out neutralization on the vinyl chloride-based monomer mixture of Basu because Basu's vinyl chloride monomers do not have carboxylic acid groups (e.g., the vinyl chloride monomers are not "neutralizable").

The Office asserts that it would be obvious to modify Ostrowicki in the manner of Basu because Basu discloses a process that includes neutralization prior to polymerization and that such neutralization results in a process that deposits lower amounts of polymer in the reactor. Applicants submit that this is an insufficient basis for asserting that one of ordinary skill in the art would modify Ostrowicki according to Basu in view of Ostrowicki's disclosure of deposit-free processes.

Ostrowicki discloses a series of examples whose conditions are described in the tables shown in columns 9-13 of the Ostrowicki patent. Essentially all of the examples disclosed in

the tables of Ostrowicki are free of reaction vessel deposits (see the row titled "Deposit in Vessel" of each of the tables in columns 9-13). The advantage allegedly disclosed in Basu is already present in the process of Ostrowicki. Applicants submit that those of ordinary skill in the art would not turn to Basu as inspiration to modify the Ostrowicki process because the process of Ostrowicki doesn't suffer from the reaction vessel deposit problem allegedly solved by Basu.

The processes described in the Egraz and Kimura references are likewise substantially different from the process of the present claims for the reason, *inter alia*, that they describe processes carried out on monomer mixtures that are different from the monomer mixture recited in the present claims.

Kimura discloses polymerizing a monomer mixture having a content of acid group-containing monomers of at least 50 mol% (see the Abstract of Kimura). The presently claimed invention recites a monomer mixture in which an ethylenically unsaturated carboxylic acid group-containing monomer is present in an amount from 0.1-10 parts by weight based on 100 parts by weight of the total weight of monomers. The Kimura monomer mixture is substantially different from the monomer mixture recited in the present claims. In fact, the Kimura monomer mixture is excluded from the present claims.

Further with respect to Kimura, the Office asserts that the cited patent's disclosure that a polymer having improved absorbency may be obtained when neutralization is carried out prior to polymerization is evidence that one of skill in the art would modify Ostrowicki. But Ostrowicki describes a process for making an aqueous dispersion of a copolymer. It makes no sense to assert that one of ordinary skill in the art would be motivated to modify Ostrowicki to form a polymer having higher water absorbency in view of the fact that the polymer obtained by the Ostrowicki process is already saturated with water.

Egraz also discloses a process that includes polymerizing a monomer mixture that is different from the monomer mixture recited in the present claims. Egraz, like Kimura, does not teach any process that discloses polymerizing a monomer mixture falling within the monomer mixture recited in the present claims.

The Office asserts one of skill in the art would modify Ostrowicki according to Egraz in order to solve a residual monomer problem. However, the process of Ostrowicki is nowhere disclosed to suffer from residual monomer or, for that matter, residual monomer in a large amount.

On the other hand, none of the art relied on by the Office discloses or suggests that carrying out polymerization of a monomer mixture that contains a carboxylic acid group-containing monomer unit can be substantially improved with respect to the amount of coagulum formed if, before polymerization, at least a portion of the carboxylic acid group-containing monomer is neutralized prior to polymerization.

Applicants thus submit that the Office failed to set forth a *prima facie* case of obviousness for at least the following reasons. (1) The Basu, Kimura and Egraz processes are drawn to different monomer mixtures that are different from the monomer mixture of the present claims and the Office failed to provide any reason why one of ordinary skill in the art would believe that the conditions of polymerizing the Basu, Kimura and Egraz monomer mixtures would be useful or effective for the polymerization of the different monomer mixtures recited in the present claims and/or disclosed in Ostrowicki. (2) Any alleged benefit of carrying out neutralization prior to polymerization disclosed in Basu, Egraz and/or Kimura has no nexus to the presently claimed invention.

Arguendo, even if the Office set forth a *prima facie* case of obviousness, to which Applicants disagree, the original specification includes evidence in rebuttal of such an

assertion in the form of a side-by-side comparison of the claimed invention with the closest prior art.

None of the cited art discloses or suggests the improvement demonstrated by Applicants with respect to reduced coagulum. The Office appears to have taken the position that any monomer mixture containing an ethylenically unsaturated monomer having carboxylic acid groups will behave in the same manner if neutralization is carried out prior to polymerization. In view of the Office's position of the equivalence of the processes of the cited art, the data of the original specification must be commensurate in scope with the claimed invention.

For the reasons discussed above, Applicants submit that all now-pending claims are in condition for allowance and respectfully request withdrawal of the rejections.

Respectfully submitted,

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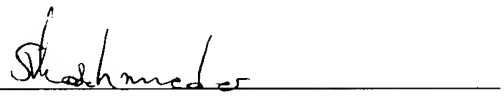

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